

WHAT IS CLAIMED IS:

1. A maskless lithography system comprising:  
an illuminating system;  
an SLM having a non-linear shape;  
an exposure system; and  
a beam splitter that directs light from the illuminating system to the SLM and from the SLM to the exposure system.
2. The system of claim 1, wherein the SLM has a curved.
3. The system of claim 1, wherein the SLM has a concave shape.
4. The system of claim 1, wherein the SLM has a spherical shape.
5. The system of claim 1, further comprising an optical element positioned between the beam splitter and the SLM.
6. A maskless lithography system comprising:  
means for illuminating that generates light;  
means for directing the light;  
means for patterning the light after it is received from the means for directing, the means for patterning the light having a non-linear patterning surface; and  
means for exposing an object with the patterned light.
7. The system of claim 6, wherein the non-linear patterning surface is curved.
8. The system of claim 6, wherein the non-linear patterning surface has a concave shape.

9. The system of claim 6, wherein the non-linear patterning surface has a spherical shape.

10. The system of claim 6, wherein the means for directing comprises a means for splitting the light.

11. The system of claim 10, wherein the means for directing further comprises a means for correcting aberrations in the light.

12. A spatial light modulator having a non-linear shape comprising:  
a non-linear support surface; and  
active areas coupled to conform to a shape of the non-linear support surface.